

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces and supersedes all prior listings of claims in the application.

Listing of Claims:

1-19. (Cancelled)

20. (Currently amended) ~~[[An]]~~ A reaction medium for enzyme-catalyzed reactions comprising an oil-in-water (o/w) emulsion composition, comprising:

- (a) water,
- (b) ~~[[an]]~~ at least one emulsifier, and
- (c) an oil phase,

wherein the emulsion is produced by the phase inversion temperature process and has a droplet size of 50 to 400 nm, and wherein said reaction medium is capable of supporting an enzyme-catalyzed reaction selected from the group consisting of hydrolysis, esterification and transesterification.

21. (Currently amended) The ~~emulsion composition~~ reaction medium of Claim 20, wherein the said oil phase comprises compounds selected from the group consisting of fatty acid alkyl esters and triglycerides.

22. (Currently amended) The ~~emulsion composition~~ reaction medium of Claim ~~[[20]]~~ 21, wherein the ~~emulsifier comprises~~ said fatty acid alkyl esters comprise compounds corresponding to formula (I)~~[[:]~~



in which R¹ is a C₆₋₂₂ alkyl group and R² is a C₁₋₄ alkyl group.

23. (Currently amended) The ~~emulsion composition~~ reaction medium of Claim 20, wherein ~~the~~ said oil phase is present in an amount of about 10 to 80% by weight of the total composition.

24. (Currently amended) The ~~emulsion composition~~ reaction medium of Claim 20, wherein ~~the~~ said oil phase is present in an amount of about 20 to 50% by weight of the total composition.

25. (Currently amended) The ~~emulsion composition~~ reaction medium of Claim 20, wherein ~~the~~ water is present in an amount of about 20 to 90% by weight of the total composition.

26. (Cancelled)

27. (Currently amended) The ~~emulsion composition~~ reaction medium of Claim 20, wherein ~~the~~ said water is present in an amount of about 30 to 70% by weight of the total composition.

28. (Currently amended) The ~~emulsion composition~~ reaction medium of Claim 20, wherein ~~the~~ said emulsifier comprises an emulsifier system comprising a hydrophilic emulsifier with a hydrophilic/lipophilic balance value of 8 to 18, and a hydrophobic emulsifier.

29. (Currently amended) The ~~emulsion composition~~ reaction medium of Claim 28, wherein the ratio of the hydrophilic emulsifier to the hydrophobic emulsifier is 10:90 to 90:10.

30. (Cancelled)

31. (Currently amended) The ~~emulsion composition~~ reaction medium of Claim 20, wherein the said emulsifier is present in an amount of about 1 to 25% by weight of the total composition.

32. (Cancelled)

33. (Currently amended) The ~~emulsion composition~~ reaction medium of Claim 20, wherein the said emulsifier is present in an amount of about 5 to 15% by weight of the total composition.

34. (Withdrawn) The emulsion composition of Claim 20, further comprising an interfacially active enzyme comprising hydrolases and/or acyl transferases.

35. (Withdrawn) The emulsion composition of Claim 34, wherein the hydrolases are selected from the group consisting of esterases, phospholipases, lipases and lipases/acyl transferases.

36. (Withdrawn) The emulsion composition of Claim 35, wherein lipases and/or lipases/acyl transferases are obtained from organisms selected from the group consisting of *Alcaligenes*, *Aspergillus niger*, *Aspergillus oryzae*, *Aeromonas aerophila*, *Bacillus species*, *Candida albicans*, *Candida antarctica* (*Trychosporon oryzae*, *Pseudozyma antarctica*), *Candida antarctica*, *Candida cylindracea*, *Candida glabrata*, *Candida maltosa*, *Candida parapsilosis*, *Candida lipolytica*, *Candida tropicalis*, *Candida viswanathii*, *Chromobacterium viscosum*, *Fusarium solani*, *Geotrichum candidum*, *Issatchenkia orientalis* (*Candida krusei*), *Kluyveromyces marxianus* (*C. kefir*, *C. pseudotropicalis*), *Mucor javanicus*, *Penicillium camemberti*, *Penicillium roqueforti*, *Pichia guilliermondii* (*Candida guilliermondii*), *Porcine pancreas*, *Pseudomonas cepacia*, *Pseudomonas fluorescens*, *Rhizomucor miehei*, *Rhizopus arrhizus*, *Rhizopus oryzae*, *Rhizopus niveus*, *Rhizopus javanicus* and *Thermomyces lanuginosus* and mixtures thereof.

37. (Withdrawn) The emulsion composition of Claim 34, wherein the enzymes are present in an amount of about 0.001 to 20% by weight, and expressed as pure enzyme or as enzyme preparation, based on the total amount of oil phase present.

38-44. (Cancelled)

45. (New) A method of carrying out an enzyme-catalyzed reaction comprising running the reaction in a reaction medium comprising an oil-in-water (o/w) emulsion comprising:

- (a) water,
- (b) at least one emulsifier, and
- (c) an oil phase,

wherein said emulsion is produced by the phase inversion temperature process and has a droplet size of 50 to 400 nm, and wherein said enzyme-catalyzed reaction is selected from the group consisting of hydrolysis, esterification and transesterification.

46. (New) The method of claim 45 wherein a cosmetic, pharmaceutical or fine chemical is produced by said enzyme-catalyzed reaction.

47. (New) The method of Claim 46, wherein said cosmetic, pharmaceutical, or fine chemical comprises a carotenoid, a sterol-containing oil component, and/or vitamin E.

48. (New) The process of Claim 45, wherein the enzyme is an interfacially active enzyme comprising hydrolases and/or acyl transferases.

49. (New) The method of claim 45 wherein said oil phase comprises compounds selected from the group consisting of fatty acid alkyl esters and triglycerides.